

increase the deposition rate and to minimize the chamber cleaning requirements. A suitable gas distribution system is disclosed in U.S. Patent No. 6,270,862, which is hereby incorporated by reference herein.

IN THE CLAIMS:

Please cancel claim 54 without prejudice to or disclaimer of the subject matter contained therein.

Please replace claims 50, 55 and 56 as follow:

50. (Amended) An inductively coupled plasma processing system, comprising:
- a plasma processing chamber;
 - a substrate holder supporting a substrate within said processing chamber;
 - an electrically-conductive coil disposed outside said processing chamber;
 - means for introducing a process gas into said processing chamber;
 - an RF energy source which inductively couples RF energy into the processing chamber to energize the process gas into a plasma state, and
 - means for maintaining the substrate holder at a temperature of about 80°C to 200°C during deposition of a material on the substrate by plasma-enhanced chemical vapor deposition.
55. (Amended) The system of Claim 50, wherein the process chamber is a vacuum chamber maintained at about 1 mTorr to about 30 mTorr.

56. (Amended) The system of Claim 56, wherein the system further comprises an electrode within the substrate holder and an RF generator connected to the electrode.

Please add new claims 59-70 as follow:

59. (New) The system of Claim 50, further comprising an RF bias power source connected to the substrate holder.

60. (New) The system of Claim 50, wherein the means for introducing the process gas comprises a primary gas ring that directs the process gas toward the substrate.

61. (New) The system of claim 60, wherein the means for introducing the process gas further comprises a secondary gas ring, the primary gas ring is between the secondary gas ring and the substrate holder.

62. (New) The system of Claim 60, wherein the means for introducing the process gas further comprises injectors connected to the primary gas ring, at least some of the injectors direct the process gas along axes that intersect an exposed surface of the substrate at an acute angle.

63. (New) The system of Claim 62, wherein some of the injectors direct the process gas in a direction away from the substrate.

64. (New) The system of Claim 62, wherein the substrate has a periphery and the injectors are each spaced outward from the periphery of the substrate.

65. (New) An inductively coupled plasma processing system, comprising:
a plasma processing chamber;

a substrate support supporting a substrate within the processing chamber;

an electrode operable to heat the substrate support;
a gas supply for introducing a process gas into the processing chamber; and
an RF energy source inductively coupling RF energy into the processing chamber to energize the process gas into a plasma state,

wherein the electrode is maintained at a temperature of about 80°C to 200°C during deposition of a material on the substrate by plasma-enhanced chemical vapor deposition.

66. (New) The system of Claim 65, wherein the substrate support comprises a ceramic material and the electrode is within the substrate support.

67. (New) The system of Claim 65, further comprising an RF bias power source connected to the electrode.

68. (New) The system of Claim 65, wherein the gas supply comprises a primary gas ring that directs the process gas toward the substrate.

69. (New) The system of claim 68, wherein the gas supply further comprises a secondary gas ring, the primary gas ring is between the secondary gas ring and the substrate holder.

70. (New) The system of Claim 68, wherein the gas supply further comprises injectors connected to the primary gas ring, the injectors direct the process gas along axes that intersect an exposed surface of the substrate at an acute angle.